

GEOGRAPHIC INFORMATION SCIENCE, CERTIFICATE

Requirements for an undergraduate certificate may be completed at any campus location offering the specified courses for the certificate.

Program Requirements

To earn an undergraduate certificate in Geographic Information Science, a minimum of 12 credits is required.

Code	Title	Credits
Required Courses		
GEOG 260	Geographic Information in a Changing World: Introduction to GIScience	3
Select 9 credits from:		9
GEOG 361	Cartography—Maps and Map Construction	
GEOG 362	Remote Sensing and Image Analysis	
GEOG 363	Geographic Information Systems	
GEOG 365	Intermediate GIS Programming	

Non-Course Requirements

Per University policy, all credit courses for a certificate require a grade of 'C' or higher, and at least two-thirds (2/3) of the credits used to complete a certificate must be earned at Penn State. If student is completing multiple certificates in Geography, no more than one (1) course may double-count for each.